

WHAT IS CLAIMED IS:

1. A filter for fitting in a bore of a fluid passage body having an inner surface, comprising:

an inlet section which is fixed in the bore of the fluid passage body at a peripheral surface thereof;

a filter section integral with the inlet section and having a plurality of holes to filter the fluid at a peripheral surface thereof which defines a tubular fluid passage with the inner surface of the fluid passage body; and

a closed end section integral with the filter section, wherein the closed end section is shaped so that a cross-sectional area between an outer surface of the closed end section and the inner surface of the fluid passage body increases gradually in a fluid flow direction.

2. A filter according to claim 1, wherein the closed end section is approximately hemispherically-shaped, so that a diameter of the closed end section is decreased toward the fluid flow direction.

3. A filter according to claim 1, wherein the closed end section is approximately conically-shaped, so that a diameter of the closed end section is decreased toward the fluid flow direction.

4. A filter for fitting in a bore of a fluid passage body, which has an inner surface defining a fluid passage,

comprising:

an inlet section fixed in the bore of the fluid passage body at a peripheral surface thereof;

a filter section integral with the inlet section and having a plurality of holes to filter the fluid at a peripheral surface thereof which defines a tubular fluid passage with the inner surface of the fluid passage body; and

a closed end section integral with the filter section,

wherein each of the holes is formed so that a diameter thereof is larger at a radially outer side of the filter section than at a radially inner side of the filter section.

5. A filter according to claim 4, wherein each of the plurality of holes is tapered to have the diameter gradually increasing toward the outer side of the filter section.

6. A filter according to claim 4, wherein each of the plurality of holes is stepped to have the diameter gradually increasing toward the outer side of the filter section.

7. A filter according to claim 4, wherein the plurality of holes is shaped in different shapes.

8. A filter according to claim 4, wherein the plurality of holes is shaped in two shapes among an approximate hemisphere, a straight bore and a tapered bore.

9. A filter according to claim 4, wherein the closed end section is shaped so that a cross-sectional area between an outer surface of the closed end section and the inner surface of the fluid passage body increases gradually in a fluid flow direction.

10. A filter for fitting in a bore of a fluid passage body, which has an inner surface defining a fluid passage, comprising:

- an inlet section fixed in the bore of the fluid passage body at a peripheral surface thereof;

- a filter section integral with the inlet section and having a plurality of holes to filter the fluid at a peripheral surface which defines a fluid passage with the inner surface of the fluid passage body; and

- a closed end section integral with the filter section, wherein the closed end section has no hole to disable flow of the fluid in an axial direction.

11. A filter for fitting in a bore of a fluid passage body, which has an inner surface, comprising:

- an inlet section fixed in the bore of the fluid passage body at a peripheral surface thereof;

- a filter section integral with the inlet section and having a plurality of holes to filter the fluid at a peripheral surface which defines a tubular fluid passage with the inner surface of the fluid passage body; and

a closed end section integral with the filter section,
wherein the tubular fluid passage has a cross-sectional
area which is equivalent to or smaller than a summation of
cross-sectional areas of the holes at the peripheral surface
of the filter section.